

S.B. Roll No.....

CONCRETE TECHNOLOGY
4TH EXAM/CIVIL/0512/May'17

DURATION: 3 HRS

M. Marks: 75

SECTION-A

Q1. Fill in the blanks:

10x1=10

- a. The mixture of cement, fine aggregate, and water is called.....
- b.apparatus is used for soundness test of cement.
- c. The initial setting time of OPC is.....
- d. Strength of cement is also called.....
- e. The weight of one bag of cement is.....
- f. Ready mixed concrete is also called.....concrete.
- g. Gypsum is added in cement for.....
- h. Cement is always batched by.....
- i. Round and smooth aggregates.....the workability.
- j. Slump of concrete is measured to test.....of concrete.

True/False.

5x1=5

- k. When fully saturated, the bulking of sand is 100%.
- l. The strength of concrete is independent of water contents in it.
- m. If the mix is dry, the slump is zero.
- n. Strength of cement is independent of storage period.
- o. The volume of one bag of cement is 0.05m³.

SECTION-B

Q2. Attempt any six questions

6x5=30

- a. Write the advantages and disadvantages of concrete?
- b. What do you mean by batching? What are the different methods of batching?
- c. Explain the slump test of concrete?
- d. What are the various types of concrete mixer commonly used? Explain in detail.
- e. What is difference b/w segregation and bleeding?
- f. What is the purpose of using admixture in concrete?
- g. Give the importance of non-destructive test?
- h. What is curing of concrete? What are the different methods of curing?
- i. What are the various methods of transportation of concrete?

SECTION-C

Q3. Attempt any three question: -

3x10=30

- 1) What do you mean by workability? Describe compacting factor test.
- 2) Explain the properties of concrete in the hardened state.
- 3) Write short note on
 - a. Bulking of sand.
 - b. Non-destructive test
 - c. Segregation
 - d. Concreting in hot weather
- 4) Give the requirement of a ware house for the storage of concrete? What precaution will be taken while storing cement in ware house?